CLEAN COPY OF AMENDED CLAIMS

2. (Amended) A method for detecting a single nucleotide polymorphism in human subjects having or at risk of having esophageal cancer, said polymorphism being indicative of risk of esophageal cancer, the method comprising:

a) amplifying a target nuclei acid in DNA isolated from a specimen of a subject;

b) purifying the PCR products;

c) DNA sequencing of the PCR products;

d) detecting single nucleotide polymorphism in $p21^{waf1/cip1}$ gene by determining codon 149, GAT→GGT transition, or by observing the presence or absence of the codon 149 transition, wherein the transition is a polymorphism that is indicative of risk of esophageal cancer.

13. (Amended) A method for detecting a $p21^{waf1/cip1}$ codon 149 polymorphic variant in human cancer patients, said $p21^{waf1/cip1}$ codon 149 variant being a predictor of radiosensitivity of tumors, said method comprising:

a) amplifying a target nuclei acid in DNA isolated from a specimen of a human subject by polymerase chain reaction (PCR) using specific oligonucleotide primers;

b) purifying the PCR products;

c) DNA sequencing of the PCR products; and

d) detecting single nucleotide polymorphism in $p21^{waf1/cip1}$ gene by determining codon 149, GAT→GGT transition, or by observing the presence or absence of the codon 149 transition, wherein the transition is a polymorphism that is indicative of risk of cancer.

14. (Amended) A method for detecting a $p21^{waf1/cip1}$ codon 149 polymorphic variant in human cancer patients using the method according to claim 2 for designing cancer treatment protocols.

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